REMARKS

Applicant's attorney wishes to thank the Examiner for the careful consideration given to this case. For convenience, the matters raised in the Office action are discussed below in the same order as presented by the Examiner.

Initially, it is noted that typographical errors have been corrected at pages 11 and 15 of the application. It is apparent that these corrections do not raise issues of the matter.

In response to paragraph 1, applicant acknowledges that the specification is broadly drafted, but believes that one skilled in the art is enabled to make and use the invention. With particular regard to the " fluid barrier layers" that are impermeable, fluid flow around the impermeable barrier and into contact with the first layer containing the pH indicating agent is contemplated. In such arrangements, the fluid barrier layer acts as a baffle as is known in the prior art and discussed in the specification at page 1, line 33 to page 2, line 5.

Each of the claim rejections under 35 USC 112, first paragraph, set forth in paragraph 2 of the action is discussed below.

With respect to claim 3, when the second layer is a fluid barrier layer that is impermeable to the fluid. It is contemplated that fluid flow from the environment will

pass around the barrier and then into contact with the first or indicator layer containing the pH indicating agent. The "baffle" operation of the fluid barrier layer is known in the prior art and discussed in the present specification, as noted above.

In response to the rejection of claim 15 under 35 USC 112, first paragraph, US Patents 6,797,209 and 5,227,109 describe the preparation of coaxial fibers. The '209 patent shows hollow fibers and the '109 patent shows a bi-component fiber including a sheath and a core. As indicated, such fibers are well known in the art. It is well within the skill of the art to prepare a coaxial fiber 36 as shown in Fig. 4 including an ink layer or coating 42 containing a pH indicating agent applied to the exterior surface of the layer 38 which is formed of a polymer having sufficient microporosity of MVTR. Similarly, a coaxial fiber 46 including an inner layer or central core 48 formed of a first polymer containing a pH indicating agent and an outer annular layer 50 formed of a second polymer having sufficient microporosity or MVTR to function as a fluid barrier. As described in the specification at page 13, lines 14-19, a plurality of fibers 36 may be arranged to contain the environment within the central passages 40. The use of the fibers 46 to provide a wetness indicator 52 is described with

respect to Fig. 6 in the paragraph bridging pages 13 and 14 of the specification.

The rejection of claim 16, 27 and 40, as well as claims 18, 29 and 42 under 35 USC 112, first paragraph, is overcome by amendment. Specifically, each of claims 16, 17 and 18 has been amended to replace the "pH indicating agent" recitation with -composite-. As clarified in claim 17 and 18, the different responses may result from different concentrations of the pH indicating agent at different locations (claim 17) or the use of a second pH indicating agent (claim 18). In a similar manner, each of claims 27, 29, 40 and 42 has been amended to replace the "pH indicating agent" recitation with -indicator-. As described immediately above, as a different pH indicating agent or different amounts of pH indicating agent are contacted, the indicator intensity of response varies.

Referring to paragraph 4 of the action, the rejections under 35 USC 112, second paragraph, of claims 2-18 and 24-50 are considered below.

With respect to claims 2 and 24, the recitation of a "ink layer" is used in a conventional manner two indicate a composition that is deposited as a liquid on a substrate and hardened to form a final ink layer on the substrate. It is agreed that been layer may contain different constituents and may indeed comprise a pH

indicator. For example, the outer diaper film may be printed with a pH indicating ink and hardened, and then printed with a fluid transmitting ink layer. The resulting composite is formed of to overlying ink layers wherein, one of the ink layers acts as an indicator layer and the other ink layer acts as a fluid barrier layer.

With regard to claim 3, the use of an impermeable fluid barrier layer is described above.

With regard to claim 12, the Examiner correctly perceives that the phrase "threshold amount of fluid" refers to the amount of fluid required to result in sufficient transmission to activate the composite or indicator. One skilled in the art would know to determine the MVTR of the fluid barrier layer in order to confirm that sufficient transmission will occur to activate the composite when exposed to the fluid environment.

Claim 13 has been amended in accordance with the Examiner's comments. More particularly, it is now indicated that the fibers have surfaces coated with "a coating containing a fluid regulating additive". Further, as the Examiner observes, it is also possible that the fibers themselves may transmit moisture.

The rejections of claim 17, 28 and 41 are in part overcome by the foregoing amendments of claims 16, 27 and 40 to clarify that it is the composite or the indicator

that provides a different response. The Examiner's further comments as to the basis for the phrase "different responses" is overcome by further amendment of claims 16, 17, 27-29 and 40-42 to recite "a different response" or "said response".

The rejection of claims 26 in 39 is overcome by amendment. More particularly, the reference to "concentration" has been deleted in favor of -amount-.

With regard to claim 35, it is believed clear that it is the pH indicating agent may be contained in at least one out of the ink layers. This is consistent with the above described diaper example. In the diaper example, a composite including two overlying ink layers is described wherein one of the ink layers includes a pH indicating agent and the other ink layer acts as they fluid barrier layer.

The rejection of claim 36 is overcome by amendment. Specifically, this claim refers to the fluid regulating additive, not the pH indicating ink layers.

The rejection of claim 37 has been overcome by amendment to delete the phrase "one layer".

The rejection of claim 38 is also overcome by amendment. More particularly, the phrase "providing the environment with a finite pH" has been deleted.

In paragraphs 5-8 of the action, various other claims are rejected under 35 USC 102(b), or in the

alternative, under 35 USC 103(a) based on a number of different prior art references. These references are discussed below.

Initially, it is noted that in accordance with the foregoing claim amendments, each of the independent claims recites a first layer, a single layer, at least one ink layer or an ink that provides an ink layer containing a pH indicating agent and a fluid regulating additive to regulate fluid contact with said pH indicating agent in the layer. (The latter recitation is particularly described at page 3, line 32 to page 4, line 2.) As discussed below, the cited prior art does not disclose or suggest the same.

JP 59106501A discloses the use of breakable microcapsules that release a pH indicating agent. Accordingly, this patent is not disclose or suggest a layer containing both a pH indicating agent and a fluid regulating additive to control the fluid contacting the pH indicating agent in the layer.

US patent 4,231,370 to Mroz et al. discloses a wetness indicator coating 26 intended to be applied on the inwardly facing surface of the backseat 21 of a diaper 20. The coating 26 includes a pH-change/color-change material such as bromo-phenol blue dispersed in a latex. This patent is not disclose or suggest a layer

containing both a pH indicating agent and a fluid regulating additive.

US patent 5,089,584 to Zimmel et al. discloses a polyester or-based hotmelt adhesive indicator material for use with disposable articles such as diapers. The pH indicating agent may be Bromocresol Green or Bromophenol Blue, and it is dissolved in the continuous polymer phase. Accordingly, this patent is not disclose the use of a pH indicating agent and a separate fluid regulating additive as set forth in all the claims presently of record.

US patent 5,167,652 to Mueller discloses a thermoplastic film 16 which may be used as the outermost layer of a diaper. The film 16 comprises a blend of a copolyester and a moisture absorbing copolyamide. When the blend is exposed to moisture, the originally transparent blend turns white. Accordingly, this patent is not disclose the claimed pH indicating agent and fluid regulating additive combined in a single layer. In fact, this patent teaches away from the use a pH indicating additives in column 2, lines 43-45.

US patent 5, 354, 289 to Mitchell et al. discloses a capacity monitor for diapers including a water impervious baffle 22 disposed between the diaper core and an indicator 24 comprising a hotmelt adhesive having a wetness indicator therein. Fluid from the diaper

environment travels around the free edge 32 of the baffle 22 in order to contact the indicator 24. Accordingly, this patent also fails to disclose the use of a pH indicator and a fluid regulating additive in the same layer as set forth in the amended claims.

For all of the forgoing reasons, the cited prior art is overcome and the claims of record are in condition for allowance.

In addition to the foregoing, additional patentable arrangements are set forth in the dependent claims. Certain of the dependent claims are discussed below.

The Examiner's attention is particularly directed to claim 4 which provides for a second fluid regulating additive in the fluid barrier layer. The use of multiple layers that each contain fluid regulating additives is not disclosed or suggested by the prior art.

Claim 10 has been amended to contain limitations similar to those in claims 25, 34 and 38. (For the Examiner's convenience, these limitations are particularly discussed at page 3, lines 6-21 of the specification.) These claims emphasize the use of the fluid regulating additive to regulate fluid contact with the pH indicating agent.

For all of the foregoing reasons, claims 1-50 presently of record are in condition for allowance and such action is requested.

If there are any fees required by this Amendment, please charge the same to Deposit Account No. 16-0820, Order No. 36554US1.

Respectfully submitted,

By: _____
Joseph J. Corso, Reg. No. 25845

1801 East Ninth Street
Suite 1200
Cleveland, Ohio 44114-3108

(216) 579-1700

March 8, 2005